

AMENDMENTS TO THE CLAIMS:

Please cancel Claims 1 through 3, 9, and 22 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 4, 10, 11, 21, and 25 as follows:

1 - 3. (Cancelled)

4. (Currently Amended) An image stabilizer for an image taking lens device, comprising:

image stabilizing means operative for stabilizing, during shaking of the image taking lens device, the image generated by said image taking lens device;

an image pickup device disposed at the imaging plane of said image taking lens device and having an imaging area which converts an optical image formed by said image taking lens device into electrical signals, said image pickup device delivering as picture signals the electrical signals derived from ~~said~~ the imaging area;

light quantity correcting means for correcting the light distribution of the image formed by the pixel signals delivered by said image pickup device; and

controlling means for causing said light quantity correcting means to effect a correction of the light quantity distribution during the image stabilizing operation being performed by said image stabilizing means, wherein in the correction said light quantity correcting means is controlled so as to vary a correction amount of light quantity among a plurality of pixels in the imaging area.

5. (Withdrawn) An image stabilizer according to Claim 4, further comprising a shake sensor for sensing shaking of said image taking lens device,

wherein said image stabilizing means comprises a shake correction lens and an actuator for actuating said shake correction lens,

wherein said light quantity correcting means comprises a gain controller for controlling the gains for the pixels contained in said imaging area of said image pickup device, and

wherein said controlling means controls said gain controller such that said gain controller varies the gains for pixels of said imaging area in accordance with a shake signal from said shake sensor, when said shake correction lens is being actuated by said actuator.

6. (Withdrawn) An optical apparatus having an image taking lens device, comprising:

a sensor for sensing shaking of said optical apparatus, said sensor outputting a shake signal corresponding to a shaking of said optical apparatus;

a shake correction lens provided in said image taking lens device, said shake correction lens being movable in directions perpendicular to the optical axis of said image taking lens device;

an actuator for actuating said shake correction lens in accordance with the shake signal from said sensor;

an image pickup device provided on the imaging plane of said image taking lens device, for converting an optical image formed by said image taking lens device into electrical signals and delivering the electrical signals as picture signals;

light quantity correction means for correcting the light quantity distribution of the image to be formed by said picture signals delivered by said image pickup device; and

controlling means for controlling said light quantity correcting means so as to effect a correction of the light quantity distribution when said shake correction lens is being actuated by said actuator.

7. (Withdrawn) An optical apparatus having an image taking lens device, comprising:

a sensor for sensing a shaking of said optical apparatus, said sensor outputting a shake signal corresponding to the shaking;

a shake correction lens provided in said image taking lens device, said shake correction lens being movable in directions perpendicular to the optical axis of said image taking lens device;

an actuator for actuating said shake correction lens in accordance with the shake signal from said sensor;

an image pickup device provided on the imaging plane of said image taking lens device, for converting an optical image formed by said image taking lens device into electrical signals and delivering the electrical signals as picture signals;

a diaphragm disposed in the light path of said image taking lens device; and  
controlling means for performing control so as to vary the aperture size of said diaphragm when said shake correction lens is being actuated by said actuator, such that the aperture size of said diaphragm is smaller when said shake correction lens is being actuated than when said shake correction lens is not being actuated.

8. (Withdrawn) An optical apparatus having an image taking lens device,  
comprising:

a sensor for sensing a shaking of said optical apparatus, said sensor outputting a shake signal corresponding to the shaking;

a shake correction lens provided in said image taking lens device, said shake correction lens being movable in directions perpendicular to the optical axis of said image taking lens device;

an actuator for actuating said shake correction lens in accordance with the shake signal from said sensor;

an image pickup device provided on the imaging plane of said image taking lens device and having an imaging area for converting an optical image formed by said image taking lens device into electrical signals and delivering the electrical signals from said imaging area as picture signals;

a gain controller for controlling the gains for the pixels contained in said imaging area of said image pickup device; and

controlling means for controlling, in accordance with the shake signal from said sensor, said gain controller so as to vary the gains for the pixels of said imaging area of said image pickup device when said shake correction lens is being actuated by said actuator.

9. (Cancelled)

10. (Currently Amended) An optical apparatus having an image taking lens device, comprising:

an image pickup device provided at the imaging plane of said image taking lens device, for converting an optical image formed by said image taking lens device into electrical signals, said image pickup device having a full imaging area and an output imaging area narrower than said full imaging area;

a sensor for sensing a shaking of said optical apparatus and for producing a shake signal corresponding to the shaking;

shake correcting means for effecting a correction of image shaking by shifting, in accordance with the shake signal from said sensor, said output imaging area to be read out from said full imaging area of said image pickup device;

a diaphragm provided in the light path of said image taking lens device; and

controlling means for performing control so as to vary the aperture size of said diaphragm during the correction of the shaking of the image being performed by said shake correcting means, the control comprising varying a full-open aperture diameter of said diaphragm according to a focal length ~~said controlling means performing control such that the aperture size~~

of said diaphragm is smaller when the image shake correcting operation is being performed by said shake correcting means than when the image shake correcting operation is not being performed.

11. (Currently Amended) An optical apparatus having an image taking lens device, comprising:

an image pickup device provided at the imaging plane of said image taking lens device, having an imaging area for converting an optical image formed by said image taking lens device into electrical signals, said image pickup device having an output imaging area narrower than ~~said~~ the imaging area and delivering the electrical signals from ~~said~~ the output imaging area as picture signals;

a sensor for sensing a shaking of said optical apparatus and for producing a shake signal corresponding to the shaking;

shake correcting means for effecting a correction of image shaking by shifting, in accordance with the shake signal from said sensor, ~~said~~ the output imaging area to be read out from ~~said~~ the imaging area of said image pickup device;

a gain controller for controlling the gains for the pixels of ~~said~~ the imaging area of said image pickup device; and

controlling means for controlling a correction amount of light quantity among a plurality of ~~said gain controller so as to vary the gains for the pixels of~~ in ~~said~~ the output imaging area of ~~aside image pickup device during the~~ image correction of the shaking operation being of ~~the image~~ performed by said shake correcting means.

12. (Previously Presented) An image stabilizer for a variable magnification lens, comprising:

means for stabilizing an image produced by the variable magnification lens during shaking of the variable magnification lens;

a first diaphragm disposed in an optical path of said variable magnification lens; and

control means for controlling said first diaphragm to vary a full-open aperture diameter of said first diaphragm according to a focal length of said variable magnification lens during stabilizing of the image by said stabilizing means.

13. (Previously Presented) An image stabilizer according to claim 12, wherein said control means provides a control to make the full-open aperture diameter of said diaphragm smaller when said variable magnification lens is on a telephoto side.

14. (Previously Presented) An image stabilizer according to claim 12, further comprising a second diaphragm, wherein said second diaphragm is an F-number diaphragm which determines an F-number.

15. (Previously Presented) An image stabilizer according to claim 14, wherein said first diaphragm and said second diaphragm are disposed adjacent to each other.

16. (Previously Presented) An image stabilizer according to Claim 15, wherein said first diaphragm is controlled by said control means in such a way as to limit an on-axial light flux when said variable magnification lens is on a telephoto side.

17. (Withdrawn) An image stabilizer according to claim 12, wherein said variable magnification lens has a decentering lens arranged to decenter in a direction perpendicular to an optical axis of said variable magnification lens so as to stabilize an image.

18. (Previously Presented) An image stabilizer according to claim 12, further comprising focal length detecting means for detecting the focal length of said variable magnification lens, wherein said control means controls said diaphragm according to the focal length detected by said focal length detecting means.

19. (Previously Presented) An image stabilizer according to claim 12, wherein said variable magnification lens is a zoom lens.

20. (Previously Presented) An image stabilizer according to claim 12, further comprising an image pickup device disposed on an image plane of said variable magnification lens and arranged to convert an optical image formed by said variable magnification lens into an electrical signal, and vibration correcting means for correcting vibration of said variable magnification lens by processing the electrical signal.

21. (Currently Amended) A device comprising a portion of an image stabilizer for a variable magnification lens, comprising:

a first diaphragm disposed in an optical path of said variable magnification lens; and

control means for controlling said first diaphragm to cause said first diaphragm to limit an on-axial light flux when said variable magnification lens is on a telephoto side,

wherein said control means provides a control to make the full-open aperture diameter of said diaphragm smaller when said variable magnification lens is on a telephoto side.

22. (Cancelled)

23. (Previously Presented) A device according to claim 21, further comprising a second diaphragm, wherein said second diaphragm is an F-number diaphragm which determines an F-number.

24. (Previously Presented) A device according to claim 23, wherein said first diaphragm and said second diaphragm are disposed adjacent to each other.

25. (Currently Amended) A device according to ~~Claim~~ claim 24, wherein said first diaphragm is controlled by said control means in such a way as to limit an on-axial light flux when said variable magnification lens is on a telephoto side.

26. (Withdrawn) A device according to claim 21, wherein said variable magnification lens has a decentering lens arranged to decenter in a direction perpendicular to an optical axis of said variable magnification lens so as to stabilize an image.

27. (Previously Presented) A device according to claim 21, further comprising focal length detecting means for detecting the focal length of said variable magnification lens, wherein said control means controls said diaphragm according to the focal length detected by said focal length detecting means.

28. (Previously Presented) A device according to claim 21, wherein said variable magnification lens is a zoom lens.